



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/575,118	05/23/2000	Paul Lapstun	NPA012US	9159

7590

11/25/2002

Kia Silverbrook
Silverbrook Research Pty Ltd
393 Darling Street
Balmain,
AUSTRALIA

EXAMINER

JORGENSEN, LELAND R

ART UNIT

PAPER NUMBER

2675

DATE MAILED: 11/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/575,118

Applicant(s)

LAPSTUN ET AL. *W*

Examiner

Leland R. Jorgensen

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 8, 10 - 23, 35 - 29, and 31 - 60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 8, 10 - 23, 35 - 29, and 31 - 60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. In view of Applicant's cancellation of claim 24, the objection to claim 24 is withdrawn.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1 - 5, 7, 8, 12, 14 - 20, 22, 23, 27 - 29, 32, 47 - 51, and 54 - 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cass, USPN 5,692,073, in view of LaMarca et al., USPN 6,279,013 B1.

Claims 1 (amended), 16 (amended), 47 (new) and 54 (new)

Claims 1 (Amended) and 47 (New) each describe a method of enabling navigation of a directory. Claims 16 (Amended) and 54 (New) each describe a system for enabling navigation of a directory.

As to claims 1 and 47, Cass teaches printing 2200 a document 1100 containing a list of directory entries 1101, 1102. The directory entries correspond to at least one node of an index of the directory 420. At least one interactive element enables a user to indicate a request for further directory information by interacting with the element using a sensing device which is adapted to transmit request data 2200 to a computer system 100. Cass teaches printing the further directory

Art Unit: 2675

2272 on a document 1110, 1120. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 4, 5, 21 and 22.

As to claims 16 and 54, Cass teaches a computer system 100 for formatting a document 1100 with a list of directory entries 1101, 1102 corresponding to at least one node of an index of the directory and at least one user interactive element to enable a user to request further directory information. Cass teaches a printer 104 for printing the document. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 3, 4, 5, 21 and 22. Cass teaches a sensing device for interacting with the element and transmitting request data to the computer system to facilitate the further information being sent from the computer system to the printer for printing in a further document. Cass, col. 6, lines 20 – 24.

Cass does not specifically teach that the list of directory entries and the coded data is printed substantially simultaneously.

LaMarca teaches that the list of directory entries and the coded data are printed substantially simultaneously. LaMarca, col. 5, lines 4 – 12 and 34 – 40; and figures 1 and 2. LaMarca also teaches a printer 40 for printing a document 10 and 42. LaMarca, figures 1 and 2. LaMarca teaches a user interactive element [tokens 18, 20, 22, 24, 60, 62, 64, and 66] with coded data [dataglyphs] indicative of an identity of the document and an identity of the at least one user interactive element. LaMarca, col. 3, lines 59 – 64; col. 5, lines 1 – 5; col. 6, lines 1 – 8; and figures 1 – 4. LaMarca teaches a sensing device [smart wand 70] for interacting with the at least one user interactive element and transmitting request data to the computer system to facilitate the further directory information being sent from the computer system to the printer for printing in a further document, the request data being indicative of the identity of the document and an

Art Unit: 2675

identity of the at least one user interactive element. LaMarca, col. 5, lines 16 – 26; col. 6, lines 24 – 52; and figure 5.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine simultaneous printing of the directory entries and coded data as taught by LaMarca with the method and system for navigating a directory as taught by Cass. LaMarca invites such combination by teaching,

The subject invention relates to the field of document generation systems, and more particularly to a method and apparatus for interacting with a periodically issued document, like a newspaper, to revise the document content to be more customized to an individual subscriber.

The invention is particularly applicable to printed documents which include dataglyphs or tokens representative of the document and the subscriber to the document, wherein subscriber redactions to the document itself can be identified for modifying content and form of future editions. However, the subject invention is applicable to any system which provides routine generation of a document edition, either printed or electronically, and that presents an opportunity for the customized editing of a second edition by general profile guidelines for communicating information indicated by the subscriber as being particularly useful or of interest.

LaMarca, col. 1, lines 4 – 19. LaMarca adds,

The present invention contemplates a new and improved system which overcomes the prolix disadvantages of mass media print communication to effectively combine the advantageous features of the two relevant technologies. That is, the customized newspaper which can now be read on an electronic display, is combined with the affordances and conveniences of a printed paper interface, for a resulting interactive newspaper, customized to a subscriber-identified profile.

LaMarca, col. 1, line 65 – col. 2, line 6. LaMarca teaches the following benefits.

One benefit obtained by use of the present invention is a customizable push system for a mass media document so that readers can adjust by general subject matter what content is presented in subsequent editions of the document.

Art Unit: 2675

Another benefit obtained from the subject invention is the provision of a document which is customized to a reader, and thereby comprises a much more efficient presentation, paper consumption and time investment to a reader in ultimately reviewing the document.

A further benefit of the subject invention is back channel communication from a class of readers to a publisher on the relative interest of a plurality of selected items in the document or a response to explicit questions for the reader, whereby the publisher can have an appreciation of reader interest in different articles and responses to specific questions.

Yet another benefit of the present invention is a convenient vehicle for the subscriber to solicit more detailed or expanded information on a subject only first generally identified by the publisher.

LaMarca, col. 2, line 64 – col. 3, line 17. LaMarca concludes,

The method facilitates back channel interaction from the reader for contemporaneous upgrading of the reader's profile in response to a review of the document content. It is intended that the form of communication must be as easy and convenient as possible for the reader and may simply comprise pen markings on the document in preselected manners, preferably cited in the document itself.

In actual implementation, the system comprises a printing operation at a popular location, such as a commuter station, where both the printer 40 and recycling bin 46 can be conveniently located. The printing operation itself is not envisioned to take very long, since the document is intended to be customized for efficiency in terms of relative subject matter for each individual subscriber.

To this point, the invention has been referred to as a newspaper and in terms of content being produced by a mass media publication. The invention has equal merit within an organization where the publication is more of a newsletter than a newspaper. In this context, the delivery would most likely be via mail boxes and the content would be more specific to that organization. As an example, a customized newsletter may contain content such as updates from information services, internal distribution lists, or menus from the cafeteria.

LaMarca, col. 27 – 49.

Claims 2, 17, 48 (new), and 55 (new)

Cass teaches a further directory information includes a list of directory entries corresponding to at least one node of an index. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 4, 5, 21 and 22.

Claims 3, 18 (amended), 49 (new), and 56 (new)

Cass shows first, pervious, next, and last nodes in the sample directory, e.g. “Myna Bird,” “Toucans” 1111, and “Parrots” 1112. Cass, figure 21.

Claims 4 and 19

Claims 4 and 19 each add that the further directory information is printed on a double-sided page.

Cass does not specifically teach that the further directory information is printed on a double-sided page.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use a double-side page with Cass to increase the amount of volume of information available to the user. Cass invites one to consider such embodiments. Cass, col. 8, lines 8 – 11.

Claims 5, 20, 50 (new), and 57 (new)

Cass teaches that the further directory information includes a list of further nodes in the directory index. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; and figures 2, 4, 5, 21 and 22.

Claims 7 and 22 (amended)

Cass teaches that the at least one user interactive element facilitates searching of the directory. Cass, col. 11, lines 22 – 25.

Claims 8 and 23

Cass teaches the step of using the sensing device to select an individual entry in the list. The selection is identified in the computer system to facilitate printing of details of the corresponding index node or directory object 2210 - 2270. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 4, 5, 21 and 22.

Claim 12

It is inherent that the document is printed on a surface of a surface defining structure. LaMarca describes such surface defining structures. LaMarca, col. 6, line 58 – col. 7, line 2.

Claims 14 (amended) and 32 (amended)

Cass describes a database 520 for keeping a retrievable record of each document 521. Each document is retrievable by using its identity, as included in its coded data. Cass, col. 10, line 12 – col. 11, line 5; col. 11, lines 15 – 33; col. 17, lines 37 – 49.

Claim 15

Cass describes retaining a retrievable record of the printed document. Cass, col. 18, line 66 - col. 19, line 6.

Claim 27

Cass describes using such system to keep track of a particular user. Cass, col. 17, lines 37 – 67.

Claim 28

Cass describes making marks on the documents. Cass, col. 17, lines 4 – 36.

Claim 29

Cass describes printing the document out demand. Cass, col. 17, lines 4 – 36.

4. Claims 6, 21, 51, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cass in view of LaMarca et al. as applied to claim 1 or 16 above, and further in view of the Microsoft Computer Dictionary, 4th ed.

Claims 6, 21, 51 (new), and 58 (new)

Claims 6, 21, 51 (new), and 58 (new) each add that interacting with the at least one user interactive element corresponds to an operation of moving to one of a parent, child or root node of the index.

Although Cass shows a parent/child relationship about the information in figure 21, Cass does not specifically state that the user interactive element corresponds to an operation of moving to one of a parent, child or root node of the index.

The Microsoft Computer Dictionary teaches a parent/child relationship in a file directory. Microsoft Computer Dictionary, p. 332.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the parent/child relationship to organize the index because such organization is an common, effective, and efficient method to organize directory information.

5. Claims 10, 11, 13, 25, 26, 31, 34 – 46, 52, 53, 59, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cass in view of LaMarca et al. as applied to claim 1 or 16 above, or over Cass, LaMarca et al., and the Microsoft Computer Dictionary as applied to claim 51 or 58 above and further in view of Dymetman et al, USPN 6,330,976 B1.

Claims 10 (amended) and 25 (amended)

Claim 10 (Amended) and adds the step of receiving, in the computer system, movement data regarding movement of the sensing device relative to the document. Claim 25 (Amended) adds that the computer system is adapted to receive movement data regarding movement of the sensing device relative to the document and interpret said movement of the sensing device as it relates to said at least one user interactive element, the sensing device, when moved relative to the document, sensing the data regarding said at least one user interactive element using at least some of the coded data and generating the data regarding its own movement relative to the document.

Neither Cass nor LaMarca teach receiving, in the computer system, movement data regarding movement of the sensing device relative to the document.

Dymetman teaches receiving, in the computer system, movement data from the sensing device regarding the identity [pid or pid'] of the document and a position [loc or loc'] of the sensing device relative to the document in order to identify the document and determine when the sensing device is used to interact with the element. Dymetman et al, col. 9, lines 16 – 22; col. 11, lines 28 – 43; and figures 1 and 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine receiving movement data about the position of the sensing device as taught by Dymetman with the method and system of enabling navigation of a directory as taught by Cass and LaMarca. Dymetman invites such combination by teaching,

The invention addresses problems in obtaining automatic actions through a network. It is often difficult to obtain an appropriate automatic action such as access to multimedia information or other information available through a

Art Unit: 2675

network. This is especially true where the context includes a physical object such as a hardcopy document, and the action should be appropriate to the object.

Dymetman, col. 2, lines 49 – 54. Dymetman adds,

The invention provides techniques that alleviate these problems. The techniques employ action/medium identifiers encoded in machine-readable markings on marking media such as sheets or stickers of paper or documents. Each action/medium identifier identifies an action. The action/medium identifier can be used to obtain an action identifier that can be provided through a network to an action device to produce the action. The action device provides the identified action automatically in response to the action identifier. The action/medium identifier also identifies the marking medium. Because the action/medium identifier identifies both the marking medium and the appropriate automatic action, the marking medium can be used to obtain the appropriate automatic action in a non-disruptive streamlined manner. The user can obtain the automatic action in a way that does not disturb normal reading activity and does not disturb document appearance.

Dymetman, col. 3, lines 22 - 38. Dymetman concludes,

The invention could be applied in various ways.

The invention could be applied in a synchronous mode to provide interactive books, magazines, maps, pocket encyclopedias, product catalogues, examination forms, paper address books, and so forth.

The invention could be applied in an asynchronous mode to allow collection of bookmarks while reading a document such as a newspaper or magazine, after which the bookmarks could be used in a batch to retrieve email clippings or print additional information.

Because the pointer behaves like a paper mouse, it can be used to record manual movements in real time, such as drawing or writing motions. Handwritten notes taken during a meeting or during making or playing of a recording can be captured and processed, handwritten faxes can be sent without using a computer, and freeform information requests can be written in an input rectangle inside an advertisement and transmitted to the sponsor for feedback.

Dymetman, col. 35, lines 2 – 19.

Claim 11

Dymetman teaches that the sensing device senses its movement relative to the document using the coded data and identifying the request in the computer system from the movement being at least partially within a zone associated with the interactive element. Dymetman, col. 11, lines 28 – 43.

Claims 13 (amended) and 31 (amended)

Dymetman teaches coded data that is substantially invisible in the visible spectrum. Dymetman, col. 11, line 46 – col. 12, line 28; col. 12, lines 59 – 67; and figure 4.

Claim 26

Dymetman teaches that the sensing device senses its movement data relative to the document using the coded data. Dymetman, col. 11, lines 28 – 43.

Claims 34 (new) and 41 (new)

Claim 34 (New) describes a method of enabling a person to navigate a directory similar to the method described in claim 47 above. Claim 41 (New) describes a system for enabling a person to navigate a directory similar to the system described in claim 54 above. Both add, however, that the indicating data is indicative of a position of the sensing device relative to the list of directory entries.

Neither Cass nor LaMarca teach that the indicating data is indicative of a position of the sensing device relative to the list of directory entries.

Dymetman that the indicating data is indicative of a position of the sensing device relative to the list of directory entries. Dymetman et al, col. 9, lines 16 – 22; col. 11, lines 28 – 43; and figures 1 and 2.

For the reasons in the discussion of claims 10 and 25 above, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine receiving indicating data indicative of a position of the sensing device as taught by Dymetman with the method and system of enabling navigation of a directory as taught by Cass and LaMarca.

Claims 35 – 38 (new) and 42 – 45 (new)

As to claims 35 - 38 (New) and claims 42 – 45 (New), see discussion of claims 48 – 51 (New) and claims 55 – 58 (New) above.

Claims 39 (new), 52 (new), and 59 (new)

Dymetman teaches receiving, in the computer system, movement data regarding movement of the sensing device relative to the document and identifying, in the computer system and from the movement data, further directory information relating to a selected node of the index of the directory. Dymetman, col. 11, lines 28 – 43; col. 35, lines 12 – 19; col. 37, lines 10 – 31 and 36 – 50.

Claims 40 (new), 53 (new), and 60 (new)

Dymetman teaches sensing its movement relative to the document using the coded data, generating the movement data and transmitting the movement data to the computer system. Dymetman, col. 11, lines 28 – 43; col. 35, lines 12 – 19; col. 37, lines 10 – 31 and 36 – 50.

Claim 46 (new)

Dymetman teaches that the computer system is adapted to receive movement data regarding movement of the sensing device relative to the document and interpret said movement of the sensing device as it relates to said at least one node of the index, the sensing device, when moved relative to the document, sensing the reference points using at least some of the coded

Art Unit: 2675

data and generating the data regarding its own movement relative to the document. Dymetman, col. 11, lines 28 – 43; col. 35, lines 12 – 19; col. 37, lines 10 – 31 and 36 – 50.

6. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cass in view of LaMarca et al. as applied to claim 16 above, and further in view of Kobayashi et al, USPN 5,881,352.

Claim 33

Claim 33 adds that the printer includes a binding means for binding the document in the event the document includes a plurality of pages.

Neither LaMarca nor Cass teach such binding means.

Kobayashi et al teaches a means for binding the document in the event the document includes a plurality of pages. Kobayashi, col. 1, lines 7 – 21.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the binder of Kobayashi with the system of Cass. Such combination provides easy binding of collected sheets and covers without manual labor. Kobayashi, col. 2, lines 36 – 48.

7. Applicant's arguments with respect to claims 1 – 33 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Klotz, Jr. et al., USPN 5,682,540, teaches a system for representing electronic files using a paper based medium.

Bando et al., USPN 6,332,039 B1, teaches a system for tracking paper documents.

Dymetman et al., USPN 6,345,304 B1 teaches obtaining network addresses from identifiers.

Yano et al., USPN 6,356,923 B1, teaches a document information management system.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leland Jorgensen whose telephone number is 703-305-2650. The examiner can normally be reached on Monday through Friday, 7:00 a.m. through 3:30 p.m..

Art Unit: 2675

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven J. Saras can be reached on 703-305-9720.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231


or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, telephone number (703) 306-0377.

lrj

A handwritten signature in black ink, appearing to read 'Steven J. Saras', is written over a horizontal line.

STEVEN SARAS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600